

**510 (k) SUMMARY OF SAFETY AND EFFECTIVENESS**

**1. Classification and Device Name**

**Classification Name**

Magnetic Resonance Diagnostic Device

**Model Number**

MJAJ-192A

**Trade/Propriety Name**

4ch Flex SPEEDER

SEP 15 2011

**2. Establishment Registration**

2020563

**3. U.S. Agent Name and Address**

**Agent Name**

Toshiba America Medical Systems, Inc. (TAMS)  
2441 Michelle Drive  
Tustin, CA 92780

**Contact Person**

Paul Biggins, Director Regulatory Affairs  
T: (714) 730-5000  
F: (714) 730-1310  
pbiggins@tams.com

**4. Manufacturing Site**

Toshiba Medical Systems Corporation (TMSC)  
1385, Shimoishigami, Otawara-Shi, Tochigi 324-8550, Japan

**5. Date of Submission**

August 31, 2011

**6. Device Intended Use**

**Field Strength**

3 T

**Resonant Nucleus**

Hydrogen

**Anatomical Region of Interest**

The extremities, joints, and trunk of the human body

**Diagnostic Use**

Diagnostic imaging of the human body, fluid visualization, 2D and 3D imaging, MR angiography, MR fluoroscopy and MRS

**7. Device Description**

The 4ch Flex SPEEDER (MJAJ-192A) is a phased array coil that can receive NMR signal from the extremities, joints, and trunk of the human body. The 4ch Flex SPEEDER is mechanically flexible, and can wrap around various regions mentioned above.

The 4ch Flex SPEEDER (MAJA-192A) consists of four coil elements and PC board. The coil elements shape single loop and the four single loop coil elements are arranged to the row. The coil is decoupled during transmission from QD whole body by means of activating the PIN diodes.

MJAJ-192A is intended to be used on the Toshiba Vantage Titan 3T MR System.

**8. Safety Parameter****Maximum static field strength**

3 T

**Maximum dB/dt**

1st operation mode specified in IEC60601-2-33 (2002)

**Maximum SAR**

1st operation mode specified in IEC60601-2-33 (2002)

**Peak and A-weighted Acoustic Noise Level**

Not applicable

**Biocompatibility**

All materials used in contact with the patient have a history of use or test data that demonstrates its biocompatibility, i.e., non-toxic, non-irritating.

**9. Imaging Performance Parameter**

Sample phantom images and clinical images are presented in Appendix F & G.

**10. Equivalency Information**

Toshiba Medical Systems Corporation believes that this 4ch Flex SPEEDER (Model Number MJAJ-192A) is substantially equivalent to the current 4ch Flex SPEEDER (Model number MJAJ-197A, K111251).

**11. Software**

There is no software required for this coil.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room – WO66-G609  
Silver Spring, MD 20993-0002

Toshiba Medical Systems Corporation, JAPAN  
% Mr. Paul Biggins  
Director Regulatory Affairs/US Agent  
2441 Michelle Dr.  
TUSTIN CA 92780

SEP 15 2011

Re: K112366  
Trade/Device Name: 4ch Flex Speeder, MJAJ-192A  
Regulation Number: 21 CFR 892.1000  
Regulation Name: Magnetic resonance diagnostic device  
Regulatory Class: II  
Product Code: MOS  
Dated: August 16, 2011  
Received: August 17, 2011

Dear Mr. Biggins:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into class II (Special Controls), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the Federal Register.

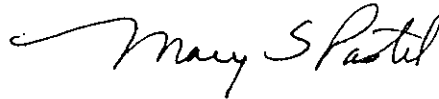
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); medical device reporting (reporting of

medical device-related adverse events) (21 CFR 803); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820). This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Parts 801 and 809), please contact the Office of *In Vitro* Diagnostic Device Evaluation and Safety at (301) 796-5450. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely Yours,

A handwritten signature in black ink, appearing to read "Mary S. Pastel", written in a cursive style.

Mary S. Pastel, Sc.D.  
Director  
Division of Radiological Devices  
Office of In Vitro Diagnostic Device  
Evaluation and Safety  
Center for Devices and Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K 112 366

Device Name: 4ch Flex SPEEDER, MJAJ-192A

### Indications for Use:

1. Imaging of the extremities (Foot and Hand), joints (knee, shoulder, ankle, wrist and elbow), and body (chest, abdomen and pelvis).

MJAJ-192A is intended to be used on the Toshiba Vantage Titan 3T MR System.

Prescription Use X  
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

Mary S. Patel  
(Division Sign-Off)  
Division of Radiological Devices  
Office of In Vitro Diagnostic Device Evaluation and Safety

510(k) Number K 112 366

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